

DISPLAY AND KEYPAD BACKLIGHT MANAGEMENT FOR PORTABLE ELECTRONIC DEVICES

ABSTRACT OF THE INVENTION

This invention is a portable electronic device (100) including a display (212),
5 an input device (210), a lighting circuit (204), a light sensor (206) and a control circuit
(208). The lighting circuit (204) includes a light source (214) to illuminate the
display (212) and the input device (210). The light sensor (206) determines the
ambient lighting conditions about the display (212) and/or the input device (210) and
generates an ambient lighting signal based on the ambient lighting conditions. The
10 control circuit (208) is coupled to the lighting circuit (204) and the light sensor (206)
and has a delayed operation mode in which a first activation of the input device (210)
illuminates the display (212) without performing any other operation of the device
(100) and a second activation of the input device performs an operation of the device
other than illuminating the display. The control circuit (208) of the portable
15 electronic device (100) may receive a reverse bias signal generated by the lighting
circuit (204) when incident with ambient lighting about the user interface (202) to
supplement or eliminate the light sensor (206).